



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/626,981	07/27/2000	Douglas Melton Carper	13DV13683	2688

6111 7590 04/23/2002

GENERAL ELECTRIC COMPANY
ANDREW C HESS
GE AIRCRAFT ENGINES
ONE NEUMANN WAY M/D H17
CINCINNATI, OH 452156301

EXAMINER

NGUYEN, KIMBERLY T

ART UNIT PAPER NUMBER

1774

DATE MAILED: 04/23/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/626,981

Applicant(s)

CARPER, DOUGLAS MELTON

Examiner

Kimberly T. Nguyen

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

This action is in response to the amendment submitted on February 14, 2002.

Acknowledgement is made of Applicant's election of Group I, claims 1-18.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 13 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is not clear where in the specification that Applicant finds support for their amendments that the "regions" are defined as being "*across...and through* the article between opposing surfaces" since Figures 1, 2, and 4 show that there is a first region and a second region in the same article which do not overlap and go "across and through" one another.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Due to Applicant's remarks on pages 3-5, the rejections based upon 35 U.S.C. 112, 2nd paragraph, of claims 1-18 are withdrawn.

Art Unit: 1774

In claims 1 and 13, it is not clear why the step of "the article...subjected...to a plurality of operating temperatures and stresses" is included in this claim since a product is claimed, not a method. ✓

The term "discrete" in the phrase "plurality of discrete regions" in claims 1 and 13 is a relative term which renders the claim indefinite. The term "discrete" is not defined by the claim, ✓ the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

Claims 1, 2, 4, 6, 8-10, 13-14, 16, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Parthasarathy et al., U.S. Pat. No. 6,251,815 B1 as previously stated in the Office Action submitted on December 5, 2001.

Regarding the newly added limitation of the area of which the regions cover, Parthasarathy shows that the invention is a three-dimensional structure formed of fibers of a ceramic material in a matrix material and that the hot and cold regions comprise the fibers and the matrix materials (column 2, lines 10-15 and column 3, lines 11-24), and *not* solely on the *surfaces* of the invention. Thus, the hot and cold regions in Parthasarathy also extend into the invention and does not merely remain on the surfaces.

Claim Rejections - 35 USC § 103

Claims 1, 3, 5, 7, 11-12, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parthasarathy et al., U.S. Pat. No. 6,251,815 B1 as previously stated in the Office Action submitted on December 5, 2001.

Regarding the newly added limitation of the area of which the regions cover, Parthasarathy shows that the invention is a three-dimensional structure formed of fibers of a ceramic material in a matrix material and that the hot and cold regions comprise the fibers and the matrix materials (column 2, lines 10-15 and column 3, lines 11-24), and *not* solely on the *surfaces* of the invention. Thus, the hot and cold regions in Parthasarathy also extend into the invention and does not merely remain on the surfaces.

Response to Arguments

Applicant's argument filed February 14, 2002 have been fully considered but they are not persuasive.

On page 3, Applicant requests that the requirement for restriction be withdrawn. Applicant argues that "because of the close relationship between the... Groups of claims, it is believed that, irrespective of the traditional different classifications..., the same fields of search would be required... of both Groups." Examiner is not persuaded. Both Groups would not require the "same fields of search," but rather are in totally different classifications. Further, as previously shown, the product can be made by materially different processes than the one instantly claimed. Therefore, the restriction requirement is made FINAL.

On page 6, Applicant argues that Parthasarathy cannot anticipate the structure of the instant invention as defined by the rejected claims because Parthasarathy shows a completely different structure than of the one instantly claimed. Applicant argues that Parthasarathy teaches a structure with differing opposing surfaces with "regions" defined as an external surface region as opposed to the instant invention, which teaches that the "regions" structurally extends within and through the article. Examiner disagrees. Parthasarathy shows that the invention can be a

Art Unit: 1774

three-dimensional structure formed of fibers of a ceramic material in a matrix material and that the hot and cold regions comprise the fibers and the matrix materials (column 2, lines 10-15 and column 3, lines 11-24), *not* solely the *surfaces* of the invention as Applicants argue. Thus, the hot and cold regions in Parthasarathy also extend into the invention and does not merely remain on the surfaces. Further, it is not clear where in the specification that Applicant finds support for their amendments that the “regions” are defined as being “*across...and through* the article between opposing surfaces” since Figures 1, 2, and 4 show that there is a first region and a second region in the same article which do not overlap and go “across and through” one another.

On page 7, Applicant argues that Parthasarathy does not remotely suggest nor is it obvious to determine the relationship as in instant claims 3 and 15. Examiner is not persuaded. Applicant has not shown that the components of Parthasarathy do not satisfy the relationship as shown in instant claims 3 and 15. In addition, absent any evidence to the contrary, Parthasarathy shows the same components and elements as in the instant claims and thus, would satisfy the relationship.

On page 7, Applicant argues that the instant invention is patentable over Parthasarathy because Parthasarathy uses the claimed ranges of volume % of fibers for the purpose of thermal expansion transition between layers and not for the same reasons as Applicant uses fibers—to provide adequate reinforcement or integrity. Examiner is not persuaded. Intended use is given little patentable weight with regard to matters of patentability.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1774

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly T. Nguyen whose telephone number is (703) 308-8176. The examiner can normally be reached on Monday to Friday, except on every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Kimberly T. Nguyen
Examiner
April 19, 2002

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

